

# HISTORIC PROPERTY INVENTORY FORM

## IDENTIFICATION SECTION

Field Site No. 276-B OAHF No. \_\_\_\_\_ Date Recorded 1 July 1997  
 Site Name Historic Organic Make-Up Building  
 Common Solvent Storage Building; Paint Shop  
 Field Recorder Holly K. Chamberlain  
 Owner's Name U.S. Department of Energy, Richland Operations Office  
 Address P.O. Box 550  
 City/State/Zip Code Richland, WA 99352

### Status

- ☒ Survey/Inventory  
☐ National Register  
☐ State Register  
☐ Determined Eligible  
☐ Determined Not Eligible  
☐ Other (HABS, HAER, NHL)  
☐ Local Designation

### Photography

Neg. No.s 44024-07,-12,-13  
 Photography Neg. No. HCRL: Roll No. 383,  
 (Roll No. & Frame No.) Frames 9, 10  
 View of North & East Side; North Side  
 Date 1 July 1997

Photo at right, Roll No.383, Frame No. 9.  
 View of north and east sides.

### Classification

District ☐ District ☐ Site ☐ Building ☒ Structure ☐ Object  
 District Status ☒ NR ☐ SR ☐ LR ☐ INV  
 Contributing ☒ Non-Contributing  
 District/Thematic Nomination Name Hanford Site Manhattan Project and Cold War Era Historic District

### Description Section

#### Materials & Features/Structural Types

Building Type Industrial  
 Plan Rectangular  
 Structural System Load-bearing Concrete  
 No. of Stories One

#### Roof Type

☐ Gable ☐ Hip  
☒ Flat ☐ Pyramidal  
☐ Monitor ☐ Other (specify) \_\_\_\_\_  
☐ Gambrel  
☐ Shed

#### Cladding (Exterior Wall Surfaces)

- ☐ Log  
☐ Horizontal Wood Siding  
     ☐ Rustic/Drop  
     ☐ Clapboard  
☐ Wood Shingle  
☐ Board and Batten  
☐ Vertical Board  
☐ Asbestos/Asphalt  
☐ Brick  
☐ Stone  
☐ Stucco  
☐ Terra Cotta  
☒ Concrete/Concrete Block  
☐ Vinyl/Aluminum Siding  
☐ Metal (specify) \_\_\_\_\_  
☐ Other (specify) \_\_\_\_\_

#### Roof Material

☐ Wood Shingle  
☐ Wood Shake  
☐ Composition  
☐ Slate  
☒ Tar/Built-up  
☐ Tile  
☐ Metal (specify) \_\_\_\_\_  
☐ Other (specify) \_\_\_\_\_  
☐ Not visible

#### Foundation

☐ Log ☐ Concrete  
☐ Post & Pier ☐ Block  
☐ Stone ☒ Poured  
☐ Brick ☐ Other (specify) \_\_\_\_\_  
☐ Not visible

### Integrity

(Include detailed description in

#### Description of Physical Appearance)

	Intact	Slight	Moderate	Extensive
Changes to plan	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Changes to windows	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Changes to original cladding	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Changes to interior	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Other (specify)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

State of Washington, Department of Community Development  
 Office of Archaeology and Historic Preservation  
 111 21st Avenue Southwest, Post Office Box 48343  
 Olympia, Washington 98504-8343 (206)753-4011

## LOCATION SECTION

Address 276-B Building, 200 East  
 City/Town/County/Zip Code Richland/Benton County/99352  
 Twp. 12 N Range 26 E Section 3 1/4 Section NE 1/4 1/4 Sec  
 Tax No./Parcel No. \_\_\_\_\_ Acreage \_\_\_\_\_  
 Quadrangle or map name Gable Butte, Washington, 7.5 minute series  
 UTM References Zone 11 Easting \_\_\_\_\_ Northing \_\_\_\_\_  
 Plat/Block/Lot \_\_\_\_\_  
 Supplemental Map(s) \_\_\_\_\_



### High Styles/Forms (Check one or more of the following)

- |   |   |
|---|---|
| <input type="checkbox"/> Greek Revival            | <input type="checkbox"/> Spanish Colonial Revival/Mediterranean |
| <input type="checkbox"/> Gothic Revival           | <input type="checkbox"/> Tudor Revival                          |
| <input type="checkbox"/> Italianate               | <input type="checkbox"/> Craftsman/Arts & Crafts                |
| <input type="checkbox"/> Second Empire            | <input type="checkbox"/> Bungalow                               |
| <input type="checkbox"/> Romanesque Revival       | <input type="checkbox"/> Prairie Style                          |
| <input type="checkbox"/> Stick Style              | <input type="checkbox"/> Art Deco/Art Moderne                   |
| <input type="checkbox"/> Queen Anne               | <input type="checkbox"/> Rustic Style                           |
| <input type="checkbox"/> Shingle Style            | <input type="checkbox"/> International Style                    |
| <input type="checkbox"/> Colonial Revival         | <input type="checkbox"/> Northwest Style                        |
| <input type="checkbox"/> Beaux Arts/Neoclassical  | <input type="checkbox"/> Commercial Vernacular                  |
| <input type="checkbox"/> Chicago/Commercial Style | <input type="checkbox"/> Residential Vernacular (see below)     |
| <input type="checkbox"/> American Foursquare      | <input checked="" type="checkbox"/> Other (specify)             |
| <input type="checkbox"/> Mission Revival          | <u>Industrial Vernacular</u>                                    |

### Vernacular House Types

- |   |   |
|---|---|
| <input type="checkbox"/> Gable Front          | <input type="checkbox"/> Cross Gable      |
| <input type="checkbox"/> Gable Front and Wing | <input type="checkbox"/> Pyramidal/Hipped |
| <input type="checkbox"/> Side Gable           | <input type="checkbox"/> Other (specify)  |

## NARRATIVE SECTION

### Study Unit Themes (check one or more of the following)

☐ Agriculture  
☐ Architecture/Landscape Architecture  
☐ Arts  
☐ Commerce  
☐ Communications  
☐ Community Planning/Development

☐ Conservation  
☐ Education  
☐ Entertainment/Recreation  
☐ Ethnic Heritage (specify) \_\_\_\_\_  
☐ Health/Medicine  
☐ Manufacturing/Industry  
☐ Military

☐ Politics/Government/Law  
☐ Religion  
☐ Science & Engineering  
☐ Social Movements/Organizations  
☐ Transportation  
☒ Other (specify) Cold War Era  
☒ **Study Unit Sub-Theme(s)** Chemical Separations; Facilities  
Support (Chemical Storage);  
Social History

### Statement of Significance

Date of Construction 1965 Architect/Engineer/Builder Vitro Engineering Company

☒ In the opinion of the surveyor, this property appears to meet the criteria of the National Register of Historic Places.

☒ In the opinion of the surveyor, this property is located in a potential historic district (National and/or local).

The 276-B Building was constructed as part of the mid-1960s Waste Management Program transition of B Plant from a chemical separations plant into a waste reduction and storage facility, processing wastes from the Reduction-Oxidation Chemical Processing Plant and Plutonium Uranium Extraction Plant. The organic solvent process solution, composed of Di(2-ethylhexyl) phosphoric acid (D2EHPA), tri-n-butyl phosphate (TBP), and diluent (normal paraffin hydrocarbon, a form of kerosene) used in B Plant operations was made in the organic make-up tank in the 276-B Building. (The diluent was kept in outside storage tanks nearby which have already been removed to address environmental compliance needs.) The process solution was pumped into B Plant for use in the extraction of strontium 89/90 from radioactive wastes left over from plutonium production which had been brought out of storage from the unreliable single-shell tanks of the 200 Area tank farms.

(See continuation sheet)

### Description of Physical Appearance

The 276-B Building is a rectangular, 35 feet by 20 feet, load-bearing, hollow concrete block building located near the northeast corner of the 221-B Building in 200 East, and physically attached to it. It is 14 feet high, and is set upon a reinforced, poured concrete foundation which is 3 feet above grade, and contains 700 square feet overall. A metal rim runs around the top of the building. A concrete loading dock with metal railings is attached to the east side of the building. A truck opening within the rails accommodates loading and unloading operations. Concrete stairs allow for pedestrian access to the dock, and into the building. Metal double loading doors on the east side also accommodate pedestrian entrance into the building. A window near the southeast corner of the building is covered over. A pedestrian access door is located at the southeast corner of the building, and is reached by a set of concrete stairs.

The interior operations area, which is a single room, contains a tank, transfer pumps, and service piping attached to walls and ceiling. The primary feature is organic make-up tank MO-154, located in the southwest corner of the building. The piping passes through the foundation to facilities within the 221-B Building. Each pipe was marked with notations indicating the fluid carried and direction of flow.

No major structural alterations have been made to the 276-B Building. In 1988, however, upgrades were made to the electrical and piping systems. The storage tanks and process piping systems were removed in the mid-1990s to achieve compliance with environmental regulations. The building is presently empty.

### Major Bibliographic References

Ridge, Tina, Building Representative, Babcock and Wilcox Hanford Co. Building Shutdown Files Kept in 222-B Building, 200 East Area.  
Richland, Washington.

United States Department of Energy. 1997. *National Register of Historic Places Multiple Property Documentation Form - Historic, Archaeological and Traditional Cultural Properties of the Hanford Site, Washington*. DOE/RL-97-02. Richland, Washington.